SMS-10 Speaker Distribution/Impedance Matching System



Introduction

The SMS-10 allows up to fen pairs of speakers to be connected to one amplifier or receiver. The autoformer matching system maintains a nominal 8 ohm load on the amplifier and prevents the loss of power associated with conventional resistive protection methods. Each of ten speaker pairs can have a nominal impedance anywhere between 4 and 16 ohms. Each autoformer has a set of "programming pins" connected to it. The pins are used to "program" each autoformer for the number of speakers being used. A removable two-pin connector block is used for the programming. The autoformers may be programmed independently of each other. This is particularly useful for installations with a mismatched number of speakers, e.g. eight speakers on the right and nine speakers on the left. Amplifiers with a continuous power rating of up to 200 watts per channel may be used. The unit features isolated left and right channel grounds making it safe for use with any amplifier. The amplifier input connector can accommodate up to 8 gauge wire and the speaker output connectors can accommodate up to 12 gauge wire.

A version of the SMS-10 is available with a sealed metal cover (SMS-10C). It allows all the wiring to be contained within the cover. Eight electrical-box style knockouts (3/4" in diameter) are provided for installations requiring conduit.

Installation Considerations

The SMS-10 can be mounted in either of two ways. The first method is to mount the unit in a standard 19" equipment rack using the supplied rack-mount hardware. The second method is to install the unit in an attic, soffit (valence), crawl space, basement, or other convenient location. Use four #10.1" long panhead screws (supplied) and attach the unit directly to the wooden floor joists, study etc. Be sure to securely fasten the SMS-10 since it may present a safety hazard if it is not firmly attached to a stable mounting surface.

Installation

Connections - Refer to figures 1 and 2 on the reverse side for details.

The SMS-10 is shipped with the autoformer connectors unplugged to allow for easier access to the speaker connectors.

The autoformers must be programmed for the number of speakers being used. Each autoformer has a set of programming pins connected to it. There are two rows of pins, one row for the left channel and one row for the right channel. The pins are arranged in five groups, three pins to a group. In front of each three-pin group there are two numbers. These numbers correspond to the number of speakers being used. Crasp the two-pin connector block and remove it by pulling it up from the programming pins (no tools required). Locate the three-pin group containing the number which corresponds to the number of speakers being used. Push the two-pin connector down onto both the center pin and the pin representing the number of speakers. Repeat the process for the other channel.

The insulation on each wire should be stripped 1/4" - no more - the ends twisted tightly together, then inserted into the appropriate hole on the circuit board connector blocks.

Remember to plug the autoformer connectors into the PC board when finished.

Specifications

Dimensions:

19" wide x 3 1/2" high x 3 7/8" deep

Weight:

12 lbs.

Power Handling:

200 watts per channel continuous (RMS), 350 watts per channel peak music power.

THD Rating:

Less than .03%, 30 Hz to 20Khz, at rated power.

